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Substitute for form 1449B/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/626,907		
		Filing Date	07/25/2003		
		First Named Inventor	Van Dyke, et al.		
		Group Art Unit	Not Yet Assigned		
		Examiner Name	Not Yet Assigned		
Sheet	1	of	1	Attorney Docket Number	SWRI-2966-03

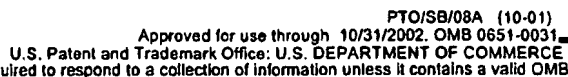
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/A.K./	A	IWATA, et al.; Coating Film For Living Tissues; November 2, 1985; total of 9 pages; Japanese Patent Application Kokai Publication No. Sho 60-220068	
↓	B	ENDO; De-Allergized Rubber or Plastic Molding Used in the Field of Medical Care; April 16, 2002; total of 5 pages; Japanese Patent Application Kokai Publication No. 2002-113815	
	C	YOSHIOKA et al; Modified Animal Hair or Wool Powder; July 11, 1989; total of 13 pages; Japanese Unexamined Patent Application Publication H01-174528	
	D	MIYAMOTO et al; Process for Producing Modified Keratin Protein; February 6, 1982; total of 4 pages; Japanese Patent Application Kokai Publication No. Sho 57-23631.	
/A.K./	E	YAMAUCHI et al; Keratin Microcapsule, Production of Keratin Microcapsule, and Cosmetics Containing Keratin Microcapsules; December 22, 1998; total of 5 pages; Japanese Patent Application Kokai Publication No. H10-337466	

Examiner Signature	/Aaron Kosar/	Date Considered	10/30/2007
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U.S. PATENT DOCUMENTS					
Examiner Initials'	Cite No. 1	Document Number Number- Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A.K.A.	us- 922.692	05-25-1909	B.B. GOLDSMITH	
	B.I.	us- 926.999	07-06-1909	CARL NEUBERG	
	C.I.	us- 960.914	06-07-1910	ARTHUR HEINEMANN	
	D.I.	us- 3.642.498	02-15-1972	ANKER	
	E.I.	us- 4.423.032	12-27-1983	ABE	
	F.I.	us- 4.474.694	10-02-1984	COCO	
	G.I.	us- 4.570.629	02-18-1986	WIDRA	
	H.I.	us- 4.751.074	06-14-1988	MATSUNAGA	
	I.I.	us- 4.895.722	01-23-1990	ABE	
	J.I.	us- 5.047.249	09-10-1991	ROTHMAN	
	K.I.	us- 5.505.952	04-09-1996	JIANG	
	L.I.	us- 5.679.819	10-21-1997	JONES	
	M.I.	us- 5.712.252	01-27-1998	SMITH	
	N.I.	us- 5.955.549	09-21-1999	CHANG	
	O.I.	us- 6.159.495	12-12-2000	TIMMONS	
A.K.A.	P.I.	us- 6.159.496	12-12-2000	BLANCHARD	
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FOREIGN PATENT DOCUMENTS					
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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)			
A.K.	Q	EP 0 298 684 A5 A2	01-11-1989	Unilever PLC	(English Abstract)
	R	EP 0454 600 A1	10-30-1991	ICP FRANCE	
	S	JP 4-189833	07-08-1992	TAKEDA Chemical	
	T	WO 98/08550	03-05-1998	FUSION MEDICAL	
	U	WO 93/22397	11-11-1993	MERCK	
A.K.	V	EP 0 468 797 A2	01-29-1992	NIIGATA Hi-Spinner	

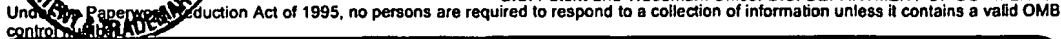
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		Examiner Name	Not Yet Assigned
		Attorney Docket Number	SWRI-2966-03
Sheet	3	of	9

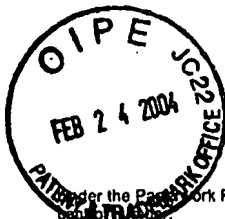
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/A.K./	AD1	J.M. GILLESPIE, et al., "Amino Acid composition of a Sulphur-Rich Protein from Wool," BIOCHIM. BIOPHY. ACTA, (1960) pp. 538-539; Vol. 39.	
	AE1	KEITH H. GOUGH, et al., "Amino Acid Sequences of alpha -Helical Segments from S-Carboxymethylkeratine-A: Complete Sequence of a Type-I Segment," BIOCHEM. J. (1978), pp. 373-385; Vol. 173	
	AF1	THOMAS C. ELLEMAN, et al., "Amino Acid Sequences of alpha -Helical Segments from S-Carboxymethylkeratine-A: Statistical Analysis," BIOCHEM. J. (1978), pp. 387-391, Vol. 173.	
	AG1	DAVID McC. HOGG, et al., "Amino Acid Sequences of alpha-Helical Segments from S-Carboxymethylkeratine-A: Tryptic and Chymotryptic Peptides from a Type-II Segment," BIOCHEM. J. (1978), pp. 353-363; Vol. 173.	
	AH1	W. GORDON CREWETHER, et al., "Amino Acid Sequences of alpha -Helical Segments from S-Carboxymethylkeratine-A: Complete Sequence of a Type-II Segment," BIOCHEM. J. (1978), pp. 365-371; Vol. 173.	
	AI1	C. EARLAND, et al., "Studies on the Structure of Keratin: II. The Amino Acid Context of Fractions Isolated from Oxidized Wool," BIOCHEMICA ET BIOPHYSICA ACTA (1956), pp. 405-411, Vol. 22.	
	AJ1	J.M. GILLESPIE, et al., "Preparation of an Electrophoretically Homogeneous Keratin Derivative from Wool," Short Communications, Preliminary Notes, (1953), pp. 481-482, Vol. 12.	
	AK1	MAURICE J. FRENKEL, et al., "The Isolation and Properties of a Tyrosine-Rich Protein from Wool: Component 0.62," EUR. J. BIOCHEM, (1973) pp. 112-119, Vol. 34.	
	AL1	R.J. BLAGROVE, et al., "The Electrophoresis of the High-Tyrosine Proteins of Keratins on Cellulose Acetate Strips," Comp. Biochem. Physiol., (1975) pp. 571-572, Vol 50B.	
	AM1	ROBERT C. MARSHALL, et al., "Successful Isoelectric Focusing of Wool Low-Sulphur Proteins," Journal of Chromatography, (1979) pp. 351-356, Vol. 172.	
/A.K./	AN1	ROBERT C. MARSHALL, "Characterization of the Proteins of Human Hair and Nail by Electrophoresis," The Journal of Investigation Dermatology, (1983) pp. 519-524, Vol. 80.	

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		First Named Inventor	MARK VAN DYKE		
		Group Art Unit	Not Yet Assigned		
		Examiner Name	Not Yet Assigned		
Sheet	4	of	9	Attorney Docket Number	SWRI-2966-03

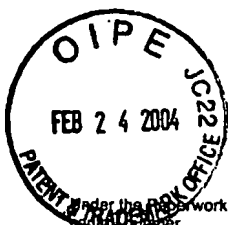
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
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I.A.K.	AO1	W. G. CREWTER, et al. "Helix-Rich Fraction from the Low-Sulphur Proteins of Wool," Nature, (July 17, 1965) P. 295, No. 4994.	
	AP1	H. LINDLEY, et al., "Occurrence of the Cys-Cys Sequence in Keratins," J. Mol. Biol., (1967) pp. 63-67, Vol. 30.	
	AG1	ROBERT C. MARSHALL, "Genetic Variation in the Proteins of Human Nail," The Journal of Investigative Dermatology, (1980) pp. 264-269, Vol. 75.	
	AR1	M. E. CAMPBELL, et al., "Compositional Studies of High-and Low-Crimp Wools," Aust. J. Biol. Sci., (1972) pp. 977-87, Vol. 25.	
	AS1	P.J REIS, et al. "A Relationship between Sulphur Content of Wool and Wool Production by Merino Sheep," Aust. J. Biol. Sci., (1967) pp. 153-63, Vol. 20.	
	AT1	ROBERT C. MARSHALL, et al., "The Keratin Proteins of Wool, Horn and Hoof from Sheep," Aust. J. Biol. Sci., (1977) pp. 389-400, Vol 30.	
	AU1	J.M. GILLESPIE. "Reaction of Sodium Borohydride with Wool," Nature, (January 31, 1959) pp.322-23, Vol. 183.	
	AV1	DAVID R. GODDARD, et al., "A Study on Keratin," J. Bio. Chem., (1934) pp. 605-14, Vol. 106.	
	AV1	L.M. DOWLING, et al., "Isolation of Components from the Low-Sulphur Proteins of Wool by Fractional Precipitation Preparative Biochemistry," (1974) pp. 203-226, Vol. 4 (3).	
	AX1	W.G. CREWTER, et al., "Reduction of S-Carboxymethylcysteine and Methionine with Sodium in Liquid Ammonia," Biochim. Biophys. Acta, (1969) pp. 609-611, Vol. 164.	
I.A.K.	AY1	W.T. AGAR, et al., "The Isolation from Wool of a Readily Extractable Protein of Low Sulphur Content," Biochim. Biophys Acta, (1958) pp. 225-226, Vol. 27.	

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I.A.K.	A21	H. LINDLEY, et al., "The Reactivity of the Disulphide Bonds of Wool," Biochem J. (1974) pp. 515-523, Vol. 139.	
	BA	M. SCHORNIG, et al., "Synthesis of Nerve Growth Fractor mRNA in Cultures of Developing Mouse Whisker Pad, A Peripheral Target Tissue of Sensory Trigeminal Neurons," The Journal of Cell Biology. (March 1993) nn. 1471-1479. Volume 120. Number 6.	
	BB	S. MITSUI, et al., "Genes for a Range of Growth Factors and Cyclin-Dependent Kinase Inhibitors are Expressed by Isolated Human Hair Follicles," British Journal of Dermatology (1997) pp. 693-98. Vol. 137.	
	BC	B.K. FILSHIE, et al., "The Fine Structure of alpha -Keratin," J. Mol. Biol. (1961) pp. 784-786, Vol. 3.	
	BD	R.D.B. FRASER, et al., "Structure of alpha -Keratin," Nature, (February 28, 1959) pp. 592-94, Vol. 183.	
	BE	R.D.B. FRASER, et al. "Helical Models of Feather Keratin Structure," Nature, (September 22, 1962) pp. 1167-1168, Vol. 195.	
	BF	B.K.FILSHIE, et al., "An Electron Microscope Study of the fine Structure of Feather Keratin," The Journal of Cell Biology (1962) pp. 1-12, Volume 13.	
	BG	W.G. CREWOTHER, et al., "Low-Sulfur Proteins from alpha -Keratins. Interrelationships between their Amino Acid Compositions, alpha-Helix Contents, and the Supercontraction of the Parent Keratin," BIOPOLYMERS (1966) pp. 905-916, Vol. 4.	
	BH	G.M. BHATNAGAR, et al., "The Conformation of the High-Sulphur Proteins of Wool I. The Preparation and Properties of a Water-Sulphur Metakeratin," Int. J. Protein Research I. (1969), nn. 199-212.	
	BI	W.G. CREWOTHER, et al., "The Preparation and Properties of a Helix-Rich Fraction Obtained by Partial Proteolysis of Low Sulphur S-Carboxymethylkerateine from Wool," (1967) The Journal of Biological Chemistry (Issue of October 10), pp. 4310-4319, Vol. 242, No 19.	
I.A.K.	BS	D.A.D. PARRY, et al., "Structure of alpha -Keratin: Structural Implication of the Amino Acid Sequences of the Type I and II Chain Segments," J. Mol. Biol. (1977) pp. 449-454, Vol. 113.	

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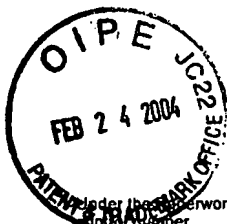
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/A.K./ ↓	(BX)	E. SUZUKI, et al., "X-Ray Diffraction and Infrared Studies of an alpha -Helical Fragment from alpha -Keratin," J. Mol. Biol. (1973) pp. 275-278, Vol. 73.	
	(BL)	G.M. BHATNAGAR, et al., "The Conformation of the High-Sulphur Proteins of Wool: II. Difference Spectra of Keratins-B," Int. J. Research, (1969) pp. 213-219.	
	(BM)	DEAN R. HEWISH, et al., "In Vitro Growth and Differentiation of Epithelial Cells Derived from Post-Embryonic Hair Follicles," Aust. J. Biol. Sci., (1982) pp. 103-109, Vol. 35.	
	(BN)	A.M. DOWNES, et al., "A Study of the Proteins of the Wool Follicle," Aust. J. Biol. Sci., (1966) pp. 319-333, Vol. 19.	
	(BO)	G. E. ROGERS, et al., "Keratin Protofilaments and Ribosomes from Hair Follicles," Nature, (January 2, 1965), pp. 77-78, Vol. 205.	
	(BP)	P.M. STEINERT, et al., "In Vitro Studies on the Synthesis of Guinea Pig Hair Keratin Proteins," Biochimica et Biophysica Acta, (1973) pp. 403-412, Vol. 312.	
	(BQ)	G.E. ROGERS, et al., "Some Observations on the Proteins of the Inner Root Sheath Cells of Hair Follicles," Biochimica et Biophysica Acta, (1958) pp. 33-43, Vol. 29.	
	(BR)	LESLIE N. JONES, et al., "Studies of Developing Human Hair Shaft Cells in Vitro," The Journal of Investigative Dermatology, (January 1988) pp. 58-64, Vol. 90.	
	(BS)	TREVOR JARMAN, et al., "Prospects for Novel Biomaterials Development," Online Publications, Pinner, UK, Presented at Biotech '85 (Europe) (1985) pp. 505-512.	
	(BT)	AKIRA TACHIBANA, et al., "Fabrication of Wool Keratins Sponge Scaffolds for Long-Term Cells Cultivation," Journal of Biotechnology, (2002) pp. 165-170, Vol. 93.	
/A.K./	(BU)	J.M. Gillispie, et al., "Periodicity in High-sulphur Proteins from Wool," Nature, (September 18, 1965) pp. 530-531, Vol. 246.	

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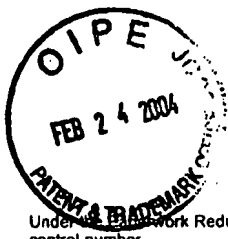
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I.A.K. ↓	Bv)	KIYOSHI YAMAUCHI, "The Development of Keratin: Characteristics of Polymer Films," [Research Report]; pp. 1-12.	
	Bw)	"Scattering to Structural Foams, Skin, Synthetic" Encyclopedia of Polymer and Science and Engineering, (1989) pp. 335-345, Vol. 15.	
	Bx)	J.M. GILLESPIE, et al., "Proteins Rich in Glycine and Tyrosine from Keratins," Comp. Biochem. Physiol., (1972) pp. 723-734, Vol. 41B.	
	By)	R.D.B. FRASER, et al., "Tyrosine-Rich Proteins in Keratins," Comp. Biochem. Physiol., (1973) pp. 943-947, Vol. 44B.	
	Bz)	J.M. GILLESPIE, et al., "Relation Between the Tyrosine Content of Various Wools and their Content of a Class of Proteins Rich In Tyrosine and Glycine," Aust. J. Biol. Sci., (1971) pp. 1189-97, Vol 24.	
	Ca)	J.M. GILLESPIE, et al., "The Macroheterogeneity of Type I Tyrosine-rich Proteins of Merino Wool," Aust. J. Biol. Sci., (1974) pp. 617-27, Vol. 27.	
	Cb)	E.G. BENDIT, et al., "The Probable Role and Location of High-Glycine-Tyrosine Proteins in the Structure of Keratins," BIOPOLYMERS, (1978) pp. 2743-2745, Vol. 17.	
	Cc)	ROBERT C. MARSHALL, et al. "High-sulphur Proteins from alpha -Keratins: 11.* Isolation and Partial Characterization of Purified Components from Mouse Hair," Aust. J. Biol. Sci. (1976) pp. 11-20, Vol. 29.	
	Cd)	ROBERT C. MARSHALL, et al. "High-Sulphur Proteins from alpha -Keratins: 1. Heterogeneity of the Proteins from Mouse Hair," Aust. J. Biol. Sci. (1976) pp. 1-10, Vol. 29.	
	Ke)	R. L. DARSKUS, et al. "The Possibility of Common Amino Acid Sequences in High-Sulphur Protein Fractions From Wool," Aust. J. Biol. Sci. (1969) pp. 1197-1204, Vol. 22.	
I.A.K./	Cf)	ROBERT C. MARSHALL, et al. "Heterogeneity and Incomplete Disulfide Reduction in the High-Sulfur Proteins of Wool," Aust. J. Biol. Sci. (1978) pp. 219-229, Vol. 31.	

Examiner Signature	Date Considered
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Substitute for form 1449B/PTO		Complete if Known	
		Application Number	10/626,907
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Filing Date	07/25/2003
		First Named Inventor	MARK VAN DYKE
		Group Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
		Attorney Docket Number	SWRI-2966-03
Sheet	8	of	9

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
/A.K./	CG1	H. LINDLEY, et al., "The Preparation and Properties of a Group of Proteins from the High- Sulphur Fraction of Wool," Biochem. J. (1972) pp. 859-867, Vol. 128.	
↓	CH1	J.M. GILLESPIE, et al., "Evidence of Homology in a High-Sulphur Protein Fraction (SCMK-B2) of Wool and Hair alpha -Keratins," Biochem. J. (1968) pp. 193-198, Vol. 110.	
	C11	J.M. GILLESPIE, et al., "A Comparative Study of High-Sulphur Proteins from alpha-Keratins," Comp. Biochem. Physiol. (1965) pp. 175-185, Vol. 15.	
	CJ1	J.M. GILLESPIE, et al., "High-Sulphur Proteins as a Major Cause of Variation in Sulphur Content Between alpha -Keratins," Nature (September 18, 1965) pp. 1293-94, Vol. 207.	
	CK1	R.D.B. FRASER, et al., "Molecular Organization in Alpha-Keratin," Nature, (March 17, 1962) pp. 1052-1055, Vol. 193.	
	CL1	DR. P. ALEXANDER, et al., "Structure of Wool Fibres," Nature, (September 2, 1950) pp. 396-398.	
	CM1	NODE, et al., "Hard Acid and Soft Nucleophile System. 2. Demethylation of Methyl Ethers of Alcohol and Phenol with an Aluminum Halide-Thiol System," J. Org. Chem (1980), pp. 4275-4277. Vol. 45.	
	CN1	ITO, et al., "Biocompatibility of Denatured Wool Keratin," Konbushi Ronbunshu [Collected Essays on Polymers], (April 1982) pp. 249-256, Vol. 39, No. 4. <i>English Abstract Only</i>	
	CO1	TATSUYA and ISHII, "Keratin Protein High Pressure Molded Article," Japanese Patent Application, (Dec. 03, 1993), total of six pages, Public Patent Announcement 1993-320358.	
	CP1	SAEKI, YOKOGAWA, and UEHARA, "Production Method For Water-soluble Keratin Protein," Japanese Patent Application, (February 21, 1990), total of five pages, Public Patent Announcement 1990-51533.	
	/A.K./	CQ1	MIYAMOTO and TSUSHIMA, "A Method for Preparing a Keratin Substance with a Low Molecular Weight," Japanese Patent Application, (July 8, 1982), total of five pages; Public Patent Disclosure Bulletin S57-109797.

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				Application Number	10/626,907
				Filing Date	07/25/2003
				First Named Inventor	MARK VAN DYKE
				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	SWRI-2966-03
Sheet	9	of	9		

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Examiner Signature	/Aaron Kosar/	Date Considered	10/30/2007
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/626,907
				Filing Date	July 25, 2003
				First Named Inventor	Van Dyke
				Art Unit	Not yet assigned
				Examiner Name	Not yet assigned
				Attorney Docket Number	SwRI-2966-03
Sheet	2	of	2		

NON PATENT LITERATURE DOCUMENTS

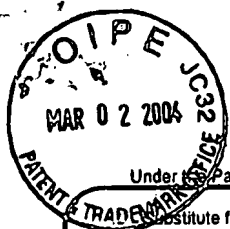
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/626,907
Filing Date	July 25, 2003
First Named Inventor	Van Dyke
Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	SwRI-2966-03

Sheet 1 of 2

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
↓ I.A.K.	A3	US- 6124265	09-26-2000	Smith, et al.	
	B3	US- 6165496	12-26-2000	Smith, et al.	
	C3	US- 3677693	07-18-1972	Fillingham	
	D3	US- 6352699	03-05-2002	Mondet, et al.	
	E3	US- 5300285	04-05-1994	Halloran, et al.	
	F3	US- 5412076	05-02-1995	Gagnieu	
	G3	US- 3250682	05-10-1966	Wilmsmann, et al	
	H3	US- 5258501	11-02-1993	Barbaric, et al.	
	I3	US- 4504644	03-12-1985	Lang, et al.	
	J3	US- 2434688	01-20-1948	Evans	
	K3	US- 5276138	01-04-1994	Yamada, et al.	
	L3	US- 5520925	05-28-1996	Maser	
	M3	US- 5948432	09-07-1999	Smith, et al.	
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FOREIGN PATENT DOCUMENTS

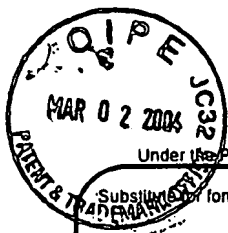
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ Number * Kind Code ⁵ (if known)				
I.A.K.	N3	EP 0540357	05-05-1993	Jones, et al.		
I.A.K.	D3	EP 0097907	01-11-1984	Haller		
I.A.K.	P3	WO 9931167	06-24-1999	Vanderhoff, et al.		

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete if Known

Application Number	10/626,907
Filing Date	July 25, 2003
First Named Inventor	Van Dyke
Art Unit	Not Yet Assigned
Examiner Name	Not Yet Assigned
Attorney Docket Number	SwRI-2966-03

Sheet 2 of 2

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/A.K./	Q3	TANAKA, YOSHIO ET AL., Reaction of Wool Keratin With Epoxides, Proceedings International Wolltextil-Forschungskonf, Vol. 3, 1976, pp. 192-201	
/A.K./	R3	FRAENKEL-CONRAT, H., The Action of 1,2-Epoxides on Proteins, Journal of Biological Chemistry, vol. 154, no. 1, June 1, 1944	

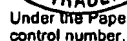
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				Application Number	10/626,907
				Filing Date	07/25/2003
				First Named Inventor	VAN DYKE, et al.
				Group Art Unit	Not Yet Assigned
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	SWRI-2966-03
Sheet	1	of	1		

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